WHAT IS CLAIMED IS:

1. A bearing and lubricant combination for use as a supporting system for a rotating shaft in a smoke and heat exhaust ventilation system and having properties permitting it to fulfill the requirement to withstand an emergency temperature of 600°C for at least 60 minutes with a stand-still of 2 minutes after 15 minutes exposure to the emergency temperature comprising a bearing comprising marterisitic stainless steel bearing rings with a steel cage, which bearing is lubricated with an electric motor grease with a base oil viscosity in the region of 50-200 cSt at 40°C.

2. The bearing and lubricant combination of claim 1 wherein the grease comprises a soap of polyurea.

3. The bearing and lubricant combination of claim 1 wherein the grease comprises a base oil of synthetic ester.

4. The bearing and lubricant combination of claim 1 wherein the bearing is a deep groove ball bearing.